RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	<u>10/719,</u> 623A
Source:	IFW16
Date Processed by STIC:	11/12/04

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 11/12/2004

PATENT APPLICATION: US/10/719,623A

TIME: 09:30:43

Input Set : A:\seq listing.app

Output Set: N:\CRF4\11122004\J719623A.raw

```
3 <110> APPLICANT: Misra and Kay
     5 <120> TITLE OF INVENTION: Trangenic Plants that are Resistant to a Broad Spectrum
             of Pathogens
     8 <130> FILE REFERENCE: 67324-01
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/719,623A
C--> 10 <141> CURRENT FILING DATE: 2003-11-20
     10 <150> PRIOR APPLICATION NUMBER: 10/719,623
    11 <151> PRIOR FILING DATE: 2003-11-20
    13 <150> PRIOR APPLICATION NUMBER: 60/125,072
    14 <151> PRIOR FILING DATE: 1999-03-17
    16 <150> PRIOR APPLICATION NUMBER: PCT/CA00/00288
    17 <151> PRIOR FILING DATE: 2000-03-16
    19 <150> PRIOR APPLICATION NUMBER: 09/936,885
    20 <151> PRIOR FILING DATE: 2001-09-17
    22 <160> NUMBER OF SEQ ID NOS: 42
    24 <170> SOFTWARE: PatentIn Ver. 2.0
    26 <210> SEQ ID NO: 1
    27 <211> LENGTH: 443
    28 <212> TYPE: DNA
    29 <213> ORGANISM: Phyllomedusa bicolor
    31 <220> FEATURE:
    32 <221> NAME/KEY: CDS
    33 <222> LOCATION: (58)..(294)
    35 <400> SEQUENCE: 1
    36 ccacgegice gattetite tecagiacte aacacattet gaattitaag aacaaac
                                                                        57
    38 atq gat atc ctg aag aaa tct ctt ttc ctt gta tta ttc ctt gga ttg
    39 Met Asp Ile Leu Lys Lys Ser Leu Phe Leu Val Leu Phe Leu Gly Leu
    40
         1
    42 gtt tee ett tee ate tgt gaa gaa gag aaa aga gaa aat gaa gat gag
                                                                        153
    43 Val Ser Leu Ser Ile Cys Glu Glu Glu Lys Arg Glu Asn Glu Asp Glu
    46 gag aaa caa gat gac gag caa agt gaa atg aag aga gct atg tgg aaa
                                                                        201
    47 Glu Lys Gln Asp Asp Glu Gln Ser Glu Met Lys Arg Ala Met Trp Lys
    48
                35
                                    40
    50 gat gtg tta aaa aaa ata gga aca gtg gcc tta cat gca gga aaa gcg
    51 Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala
                                55
    54 gct tta ggt gca gtt gct gat aca ata agt caa gga gag caa taa
                                                                        294
    55 Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln Gly Glu Gln
                            70
    58 agtgaaaaaa atttaaaaatt gaattactet aaatagaaca attagcaata attgtgteaa 354
    62 aaaaaaaaa aaaaaaaaa aaaaaaaaa
                                                                        443
```

RAW SEQUENCE LISTING DATE: 11/12/2004 PATENT APPLICATION: US/10/719,623A TIME: 09:30:43

Input Set : A:\seq listing.app

Output Set: N:\CRF4\11122004\J719623A.raw

```
65 <210> SEQ ID NO: 2
66 <211> LENGTH: 78
67 <212> TYPE: PRT
68 <213 > ORGANISM: Phyllomedusa bicolor
70 <400> SEQUENCE: 2
71 Met Asp Ile Leu Lys Lys Ser Leu Phe Leu Val Leu Phe Leu Gly Leu
                  5
                                       10
74 Val Ser Leu Ser Ile Cys Glu Glu Lys Arg Glu Asn Glu Asp Glu
                                  25
77 Glu Lys Gln Asp Asp Glu Gln Ser Glu Met Lys Arg Ala Met Trp Lys
                               40
80 Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala
                          55
83 Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln Gly Glu Gln
84 65
                       70
87 <210> SEQ ID NO: 3
88 <211> LENGTH: 27
89 <212> TYPE: PRT
90 <213> ORGANISM: Phyllomedusa bicolor
92 <400> SEQUENCE: 3
93 Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala
94 1 5
                                       10
96 Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln
97
               20
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 31
102 <212> TYPE: PRT
103 <213> ORGANISM: Phyllomedusa bicolor
105 <400> SEQUENCE: 4
106 Ala Met Trp Lys Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His
                   5
                                        10
109 Ala Gly Lys Ala Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln
110
               20
                                    25
113 <210> SEQ ID NO: 5
114 <211> LENGTH: 36
115 <212> TYPE: PRT
116 <213> ORGANISM: Pachymedusa dacnicolor
118 <400> SEQUENCE: 5
119 Gly Met Trp Ser Lys Ile Lys Asn Ala Gly Lys Ala Ala Ala Lys Ala
120 1
                                        10
122 Ser Lys Lys Ala Ala Gly Lys Ala Ala Leu Gly Ala Val Ser Glu Ala
               20
125 Leu Gly Glu Gln
            35
129 <210> SEQ ID NO: 6
130 <211> LENGTH: 31
131 <212> TYPE: PRT
132 <213> ORGANISM: Pachymedusa dacnicolor
134 <400> SEQUENCE: 6
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/719,623A

DATE: 11/12/2004
TIME: 09:30:43

Input Set : A:\seq listing.app

Output Set: N:\CRF4\11122004\J719623A.raw

135 Ala Leu Trp Lys Thr Leu Leu Lys Lys Val Gly Lys Val Ala Gly Lys 10 136 1 138 Ala Val Leu Asn Ala Val Thr Asn Met Ala Asn Gln Asn Glu Gln 20 25 142 <210> SEQ ID NO: 7 143 <211> LENGTH: 35 144 <212> TYPE: PRT 145 <213> ORGANISM: Agalychnis annae 147 <400> SEQUENCE: 7 148 Gly Met Trp Ser Thr Ile Arg Asn Val Gly Lys Ser Ala Ala Lys Ala 149 1 5 1.0 151 Ala Asn Leu Pro Ala Lys Ala Ala Leu Gly Ala Ile Ser Glu Ala Val 20 25 154 Gly Glu Gln 155 35 158 <210> SEQ ID NO: 8 159 <211> LENGTH: 29 160 <212> TYPE: PRT 161 <213> ORGANISM: Agalychnis annae 163 <400> SEQUENCE: 8 164 Gly Met Phe Thr Asn Met Leu Lys Gly Ile Gly Lys Leu Ala Gly Gln 165 1 5 10 167 Ala Ala Leu Gly Ala Val Lys Thr Leu Ala Gly Glu Gln 20 171 <210> SEQ ID NO: 9 172 <211> LENGTH: 30 173 <212> TYPE: PRT 174 <213> ORGANISM: Agalychnis annae 176 <400> SEQUENCE: 9 177 Ser Leu Trp Ser Lys Ile Lys Glu Met Ala Ala Thr Ala Gly Lys Ala 178 1 5 10 . 180 Ala Leu Asn Ala Val Thr Gly Met Val Asn Gln Gly Glu Gln 20 181 25 184 <210> SEQ ID NO: 10 185 <211> LENGTH: 34 186 <212> TYPE: PRT 187 <213> ORGANISM: Phyllomedusa sauvagei 189 <400> SEQUENCE: 10 190 Ala Leu Trp Lys Thr Met Leu Lys Lys Leu Gly Thr Met Ala Leu His 191 1 10 193 Ala Gly Lys Ala Ala Leu Gly Ala Ala Ala Asp Thr Ile Ser Gln Gly 196 Thr Gln 200 <210> SEQ ID NO: 11 201 <211> LENGTH: 34 202 <212> TYPE: PRT 203 <213> ORGANISM: Phyllomedusa sauvagei 205 <400> SEQUENCE: 11

206 Ala Leu Trp Phe Thr Met Leu Lys Lys Leu Gly Thr Met Ala Leu His

RAW SEQUENCE LISTING DATE: 11/12/2004 PATENT APPLICATION: US/10/719,623A TIME: 09:30:43

Input Set : A:\seq listing.app

Output Set: N:\CRF4\11122004\J719623A.raw

```
10
209 Ala Gly Lys Ala Ala Leu Gly Ala Ala Ala Asn Thr Ile Ser Gln Gly
210
                20
212 Thr Gln
216 <210> SEQ ID NO: 12
217 <211> LENGTH: 30
218 <212> TYPE: PRT
219 <213> ORGANISM: Phyllomedusa sauvagei
221 <400> SEQUENCE: 12
222 Ala Leu Trp Lys Asn Met Leu Lys Gly Ile Gly Lys Leu Ala Gly Lys
                                        1.0
225 Ala Ala Leu Gly Ala Val Lys Lys Leu Val Gly Ala Glu Ser
     20
229 <210> SEQ ID NO: 13
230 <211> LENGTH: 27
231 <212> TYPE: PRT
232 <213> ORGANISM: Phyllomedusa sauvagei
234 <400> SEQUENCE: 13
235 Ala Leu Trp Met Thr Leu Leu Lys Lys Val Leu Lys Ala Ala Ala Lys
236 1 5
238 Ala Leu Asn Ala Val Leu Val Gly Ala Asn Ala
239
                20
242 <210> SEQ ID NO: 14
243 <211> LENGTH: 29
244 <212> TYPE: PRT
245 <213> ORGANISM: Phyllomedusa sauvagei
247 <400> SEQUENCE: 14
248 Gly Leu Trp Ser Lys Ile Lys Thr Ala Gly Lys Ser Val Ala Lys Ala
                    5
251 Ala Ala Lys Ala Ala Val Lys Ala Val Thr Asn Ala Val
252
                20
                                    25
255 <210> SEQ ID NO: 15
256 <211> LENGTH: 329
257 <212> TYPE: DNA
258 <213> ORGANISM: Rana temporaria
260 <220> FEATURE:
261 <221> NAME/KEY: CDS
262 <222> LOCATION: (53)..(238)
264 <400> SEQUENCE: 15
265 eccetecage tgtetacatt etcataacca actgaaccae eegageecaa ag atg tte 58
                                                             Met Phe
266
                                                                     106
269 acc ttq aaq aaa tcc ctc tta ctc ctt ttc ttc ctt ggg acc atc aac
270 Thr Leu Lys Lys Ser Leu Leu Leu Leu Phe Phe Leu Gly Thr Ile Asn
                                10
                                                    15
             5
                                                                     154
273 tta tet ete tgt gag gaa gag aga gat gee gat gaa gaa aga aga gat
274 Leu Ser Leu Cys Glu Glu Glu Arg Asp Ala Asp Glu Glu Arg Arg Asp
275 20
                           25
277 gat ctc gaa gaa agg gat gtt gaa gtg gaa aag cga ttt ttt cca gtg
```

DATE: 11/12/2004

PATENT APPLICATION: US/10/719,623A TIME: 09:30:43 Input Set : A:\seq listing.app Output Set: N:\CRF4\11122004\J719623A.raw 278 Asp Leu Glu Glu Arg Asp Val Glu Val Glu Lys Arg Phe Phe Pro Val 40 281 att qqa aqq ata ctc aat qqt att ttq qqa aaa taa ccaaaaaaag 248 282 Ile Gly Arg Ile Leu Asn Gly Ile Leu Gly Lys 55 283 285 ttaaaacttt ggaaatggaa ttggaaatca tctaatgtgg aatgtcattt agctaaatgc 308 287 acatcaaatg tcttataaaa a 290 <210> SEQ ID NO: 16 291 <211> LENGTH: 61 292 <212> TYPE: PRT 293 <213> ORGANISM: Rana temporaria 295 <400> SEQUENCE: 16 296 Met Phe Thr Leu Lys Lys Ser Leu Leu Leu Phe Phe Leu Gly Thr 297 1 10 299 Ile Asn Leu Ser Leu Cys Glu Glu Glu Arg Asp Ala Asp Glu Glu Arg 20 25 302 Arg Asp Asp Leu Glu Glu Arg Asp Val Glu Val Glu Lys Arg Phe Phe 305 Pro Val Ile Gly Arg Ile Leu Asn Gly Ile Leu Gly Lys 50 55 309 <210> SEQ ID NO: 17 310 <211> LENGTH: 13 311 <212> TYPE: PRT 312 <213> ORGANISM: Rana temporaria 314 <400> SEQUENCE: 17 315 Phe Phe Pro Val Ile Gly Arg Ile Leu Asn Gly Ile Leu 319 <210> SEQ ID NO: 18 320 <211> LENGTH: 13 321 <212> TYPE: PRT 322 <213> ORGANISM: Rana temporaria 324 <400> SEQUENCE: 18 325 Phe Leu Pro Leu Ile Gly Arg Val Leu Ser Gly Ile Leu 1 329 <210> SEQ ID NO: 19 330 <211> LENGTH: 13 331 <212> TYPE: PRT 332 <213> ORGANISM: Rana temporaria 334 <400> SEQUENCE: 19 335 Leu Leu Pro Ile Val Gly Asn Leu Leu Lys Ser Leu Leu 5 10 1 339 <210> SEQ ID NO: 20 340 <211> LENGTH: 13 341 <212> TYPE: PRT 342 <213> ORGANISM: Rana temporaria

RAW SEQUENCE LISTING

344 <400> SEQUENCE: 20

349 <210> SEQ ID NO: 21

1

345 Leu Leu Pro Ile Leu Gly Asn Leu Leu Asn Gly Leu Leu

VERIFICATION SUMMARY

DATE: 11/12/2004

PATENT APPLICATION: US/10/719,623A

TIME: 09:30:44

Input Set : A:\seq listing.app
Output Set: N:\CRF4\11122004\J719623A.raw

:10 M:270 C: Current Application Number differs, Replaced Current Application No :10 M:271 C: Current Filing Date differs, Replaced Current Filing Date